

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 26085 WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2005/000841	International filing date (<i>day/month/year</i>) 28 January 2005 (28.01.2005)	Priority date (<i>day/month/year</i>) 30 January 2004 (30.01.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant MIXIS FRANCE S.A.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 31 July 2006 (31.07.2006) Authorized officer Agnes Wittmann-Regis e-mail: pt06@wipo.int
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

18/8

PCT
 REC'D 07 JUL 2005

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
 (PCT Rule 43bis.1)

Date of mailing
 (day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
 see form PCT/ISA/220

FOR FURTHER ACTION
 See paragraph 2 below

International application No.
 PCT/EP2005/000841

International filing date (day/month/year)
 28.01.2005

Priority date (day/month/year)
 30.01.2004

International Patent Classification (IPC) or both national classification and IPC
 C12N15/81, C12N1/15, C12N1/19

Applicant
 MIXIS FRANCE S.A.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/000841

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☒ in written format
 - ☒ in computer readable form
 - c. time of filing/furnishing:
 - ☒ contained in the international application as filed.
 - ☒ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/000841

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-44
Inventive step (IS)	Yes: Claims	
	No: Claims	1-44
Industrial applicability (IA)	Yes: Claims	
	No: Claims	1-44

2. Citations and explanations

see separate sheet

Section V

1. The claims should clearly specify all the essential features needed to define the invention. When reading the claims a person of average skill in the art should be able to make a technical sense out of it. However, present claims 1-44 are unduly broad and do not specify how to generate and detect the recombinant DNA sequences. In other words, Applicant attempts to define the subject matter for which protection is sought by using only vague and imprecise terms and expressions like "recombinant cassette", that apparently can be a "cloning vehicle" or even an entire YAC; "marker sequence" and "target sequence" that are "homologous" to some locus, or unclear internal designations like for instance "pMXY9" and "pMXY12". Thus, the subject matter of present claims are defined only by the result to be achieved, which is not allowable (Article 6 and Guidelines, CIII-4.7 PCT). Therefore, claims 1, 8 and 14 are unclear.
2. Furthermore, present international application provides with only a limited number of ways to perform the process of present claims 1-35, that can serve as the support for the extremely broad scope of said claims. Thus, this International Search Authority considers the subject matter of present international application as not sufficiently disclosed and, therefore not fully supported by the description (Article 5/6 PCT).
3. In view of the above, novelty and inventive step of the present application cannot be acknowledged by this International Search Authority.
4. It is well known in the art that targeted DNA recombination, especially when performed *in vivo* appears to be a delicate process which success depends strongly on the precise choice of strictly defined DNA sequences flanking the sequence to be recombined. The vague and imprecise definition of the process of present claims 1-35 and the plasmids/strains of the claims 36-44 which are apparently not connected by any means to the process of claims 1-35, are unclear. This International Search Authority has serious doubts that a person skilled in the art will be able to reproduce the subject matter of present application without suffering undue burden.